

中国外来入侵植物的学名考证 (3)*

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摘要: 基于中国外来入侵植物的相关报道与文献, 发现一些入侵植物的学名使用比较混乱: 不同时期、不同地区、不同作者在报道同一外来物种时使用不同的学名, 或因中文名相近, 而将其他植物作为外来入侵植物报道。依据最新资料, 对国内报道的 16 种外来入侵植物学名进行了考证, 包括中文名、英文名、异名、原产地及其在国内外的分布情况。

关键词: 中国; 外来; 入侵植物; 学名考证

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Nomenclatural Notes on Alien Invasive Vascular Plants in China (3)*

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Abstract: Based on literatures of alien invasive plants in China, the scientific names of sixteen species are revised, since their records in the Chinese literatures are confused: the same species with different scientific names were used by different authors in different regions and in different times, even different species with similar Chinese names were treated as identical. The data from floras updated were employed to compile the scientific name of each species, along with vernacular name, synonym, their origin and distribution both in China and abroad.

Key words: China; Alien; Invasive plants; Nomenclatural notes

1. *Amaranthus cruentus* Linnaeus, Syst. Nat. (ed. 10) **2**: 1269. 1759; Bao B. J., S. E. Clematis & T. Borsch in Fl. Chin. **5**: 419. 2003; S. L. Mosyakin in Fl. N. Amer. **4**: 410. 2003. Syn. *Amaranthus paniculatus* Linnaeus, Sp. Pl. (ed. 2) **2**: 1406. 1763 (Amaranthaceae).

Blood amaranth (老鸦谷), cultivated as ornamental and pseudocereal almost worldwide from tropical to warm-temperate regions, and sometimes escaped and naturalized near places of cultivation, has

been widely cultivated in China: Anhui, Beijing, Chongqing, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Henan, Heilongjiang, Hubei, Hunan, Jiangsu, Jilin, Jiangxi, Liaoning, Nei Mongol, Qinghai, Shaanxi, Shandong, Shanxi, Shanghai, Sichuan, Tianjin, Xizang, Yunnan, Zhejiang^①. It usually called as fan sui xian (繁穗苋) in Chinese but treated as *Amaranthus paniculatus* (曲波, 2003; Qu *et al.*, 2006a,b; Li *et al.*, 2007; Wang *et al.*, 2007; Fu *et al.*, 2009; Gao and Cao, 2010; Chen

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① According to *The Checklist of the Chinese Invasive Plants* (Ma, 2013, same as below)

et al., 2011; 万方浩等, 2012; Fu *et al.*, 2012; Lin *et al.*, 2012a; Wang *et al.*, 2012).

2. *Bromus catharticus* Vahl, *Symb. Bot.* **2**: 22. 1791. Liu L., Zhu G. H. & K. H. Ammann in *Fl. Chin.* **22**: 386. 2006; Hsu C.-C. in *Fl. Taiwan* (2nd Edition) **5**: 370. 2000. *Syn. Bromus unioides* Kunth, *Nov. Gen. Sp.* **1**: 151. 1815 (Gramineae).

Rescuegrass (扁穗雀麦), native to South America, widely introduced as a winter forage now has been adventive in most temperate countries of Asia, Europe, Australia, North America and China: Beijing, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Hubei, Jiangsu, Nei Mongol, Qinghai, Shaanxi, Sichuan, Taiwan, Xinjiang, Yunnan. In some literatures, it's treated as *Bromus unioides* (Wu *et al.*, 2004).

3. *Crotalaria micans* Link, *Enum. Hort. Berol. Alt.* **2**: 228–229. 1822. Li J. Q., H. Sun, R. M. Polhill, & M. G. Gilbert in *Fl. Chin.* **10**: 107. 2010; Huang T.-C., Ohashi, H. in *Fl. Taiwan* (2nd Edition). **3**: 228–232. 1993. *Syn. Crotalaria anagyroides* Kunth, *Nov. Gen. Sp. (folio ed.)* **6**: 317. 1824 (Leguminosae).

Caracas rattlebox (三尖叶猪屎豆), originated from C and S America, has been introduced into many tropical countries, including those in Asia and Africa where it has been locally naturalized. It is also cultivated and naturalized in C and S China: Fujian, Guangdong, Guangxi, Hainan, Hubei, Taiwan and Yunnan but sometimes treated as *Crotalaria anagyroides* (Fan *et al.*, 2008).

4. *Duranta erecta* Linnaeus, *Sp. Pl.* **2**: 637. 1753. Chen S. L. & M. G. Gilbert in *Fl. Chin.* **17**: 2. 1994. *Syn. Duranta repens* Linnaeus, *Sp. Pl.* **2**: 637. 1753 (Verbenaceae).

Golden dewdrops (假连翘), native to Tropical America, usually cultivated for ornamental purposes, occasionally escaped and naturalized near farms in Fujian, Guangdong, Guangxi, Hainan,

Hunan, Jiangxi, Macao, Taiwan, Hongkong, Yunnan, Zhengjiang. In some literatures, it was treated as *Duranta repens* (萧如英, 1980; Sun and Xiang, 2004; Ou and Lu, 2006; 解焱, 2008; 陈运造, 2006).

5. *Dysphania schraderiana* (Schultes) Mosyakin & Clemants, *Ukrains'k. Bot. Žurn.* **59**: 383. 2002. Zhu G. L., S. L. Mosyakin & S. E. Clemants in *Fl. Chin.* **5**: 377. 2003. Basionym *Chenopodium schraderianum* Roemer & Schultes, *Syst. Veg.* **6**: 260. 1820. *Syn. Chenopodium foetidum* Schrader, *Mag. Neuesten Entdeck. Gesammten Naturk. Ges. Naturf. Freunde Berlin* **2**: 79. 1808 (not Lamarck 1778) (Chenopodiaceae).

Foetid Goosefoot (菊叶香藜), species with a strong odor from Africa, SW Asia, and S. Europe but naturalizes in North America and locally elsewhere. In China, it's found in Beijing, Gansu, Liaoning, Nei Mongol, Qinghai, Shaanxi, Shanxi, Sichuan, Xizang, Yunnan, but treated as *Chenopodium foetidum* (孔宪武和简焯坡, 1979; Lin *et al.*, 2009).

6. *Eclipta prostrata* (Linnaeus) Linnaeus, *Mant. Pl.* **2**: 286. 1771. Chen Y. S. & D. J. Nicholas Hind in *Fl. Chin.* **20–21**: 1481. 2011; Chung K. F. in *Fl. Taiwan* (2nd Edition). **4**: 935–937. 1998. Basionym *Verbesina prostrata* Linnaeus, *Sp. Pl.* **2**: 902. 1753. *Syn. Eclipta zippeliana* Blume, *Bijdr. Fl. Ned. Ind.* **914**. 1826 (Asteraceae).

False daisy (鳢肠), native to Americas, introduced and naturalized in Africa, Asia, Australia, Europe and Pacific islands. In China, it has spread almost all over the country from riversides, fields to abandoned ponds. *Eclipta prostrata* is a highly variable species widely distributed in separated parts of the world and is greatly influenced by the habitats in which they grow. Almost all literatures treated *Eclipta zippeliana* as synonymy of *Eclipta prostrata*, but other treated it as another species (陈运造, 2006).

7. *Erigeron bonariensis* Linnaeus, Sp. Pl. **2**: 863. 1753. Chen Y. L. & L. Brouillet in Fl. Chin. **20–21**: 1107. 2011. Syn. *Conyza bonariensis* (Linnaeus) Cronquist, Bull. Torrey Bot. Club **70** (6): 632. 1943; *Conyza crispa* (Pourret) Ruprecht, Bull. Cl. Phys.-Math. Acad. Imp. Sci. Saint-Pétersbourg **14**: 235. 1856; *Erigeron crispus* Pourret, Hist. & Mém. Acad. Roy. Sci. Toulouse **3**: 318–319. 1788 (Asteraceae).

Hairy fleabane (香丝草), native to South America, widely naturalized as a weed in tropical and subtropical regions worldwide, including in New Zealand, South Africa, Kenya, Tanzania, the USA, Europe and China. It is a kind of crop weeds, particularly serious in no-till farming systems. It has been treated as *Conyza bonariensis* in almost all Chinese references (Du *et al.*, 2002; Guo *et al.*, 2002; Chen *et al.*, 2003; Wu and Qiang, 2003; Wang *et al.*, 2004; Wu *et al.*, 2004; Hu *et al.*, 2005; Yi *et al.*, 2005; Chen *et al.*, 2006; Zang *et al.*, 2006; Hu *et al.*, 2007; Wang *et al.*, 2007; Li *et al.*, 2008; Tang *et al.*, 2008; Ji *et al.*, 2009; Shu *et al.*, 2009; Wang *et al.*, 2009; Qi *et al.*, 2010; Wang, 2010; 徐海根和强胜, 2011; Ju *et al.*, 2011; Li *et al.*, 2011; Yu *et al.*, 2011; 万方浩等, 2012; Lin *et al.*, 2012b; Zhu, 2012), with the Chinese name as ye tang hao (野塘蒿). Meanwhile, a few literatures used as *Conyza crispus* (Zhang, 2004; Zhang, 2006; Xie and Zhang, 2012), a wrong spelling of *Conyza crispa*.

8. *Euphorbia hypericifolia* Linnaeus, Sp. Pl. **1**: 454. 1753. J. S. Ma & Michael G. Gilbert in Fl. Chin. **11**: 293. 2008; The Editorial Committee of the Flora of Taiwan in Fl. Taiwan (1st Edition) **6**: 79. 1979. Syn. *Chamaesyce hypericifolia* (Linnaeus) Millspaugh, Publ. Field Columb. Mus., Bot. Ser. **2** (7): 302. 1909 (Euphorbiaceae).

Graceful sandmat (通奶草), native to New World and naturalized in many parts of the Old World. In China it distributes at Anhui, Beijing, Chongqing, Guangdong, Guangxi, Guizhou, Hain-

an, Hebei, Hongkong, Hubei, Hunan, Jiangxi, Liaoning, Macao, Nei Mongol, Shanxi, Shanghai, Sichuan, Taiwan, Yunnan and Zhejiang. This species has been much confused with *Euphorbia indica* (Liu *et al.*, 2002; Lei *et al.*, 2006) which was called as nan ya da ji (南亚大戟) in Chinese in FOC, but different through the puberulent on stems and capsules (Raju and Rao, 1979).

9. *Euphorbia nutans* Lagasca, Gen. Sp. Pl. 17. 1816. Shishkin B. K. & E. G. Bobrov in Fl. U. S. S. R. (English edition translated from Russian), **14**: 371. 1974. Syn. *Euphorbia preslii* Gussone, Fl. Sic. Prodr. **1**: 539. 1827 (Euphorbiaceae).

Eyebane (大地锦), a weed in cultivated fields and along roadsides, often along seashores, originated from tropical South America, was introduced into Central Europe and Atlantic Europe and Western Mediterranean. In China, it was distributed in Anhui, Beijing, Hebei, Jiangsu, Liaoning, Shanghai. In some literatures it is treated as *Euphorbia preslii* (Hu *et al.*, 2005).

10. *Galinsoga quadriradiata* Ruiz & Pavón, Syst. Veg. Fl. Peruv. Chil. **1**: 198. 1798. Chen Y. S. & D. J. Nicholas Hind in Fl. Chin. **20–21**: 1474. 2011. Peng C.-I in Fl. Taiwan (2nd Edition) **4**: 968. 1998. Syn. *Galinsoga ciliata* (Rafinesque) S. F. Blake, New Fl. **1**: 67. 1836 (Asteraceae).

Shaggy soldier (粗毛牛膝菊), species native to tropical America, now has been a cosmopolitan weed. In China, it distributes in Anhui, Chongqing, Guizhou, Hubei, Heilongjiang, Jiangsu, Jiangxi, Liaoning, Shaanxi, Shanghai, Yunnan, Zhejiang and naturalized in northern and central parts of Taiwan along roadsides. In some literatures, it is treated as *Galinsoga ciliata* (Chen *et al.*, 2003; Li *et al.*, 2006; Gao *et al.*, 2008; Mei *et al.*, 2009; Shu *et al.*, 2009; Zhang and Zhang, 2009; Guo *et al.*, 2010; 丁炳扬和胡仁勇, 2011; Yang *et al.*, 2011).

11. *Justicia adhatoda* Linnaeus, Sp. Pl. **1**: 15. 1753; Hu J. Q., Deng Y. F. & T. F. Daniel in Fl. Chin. **19**: 456. 2011. Syn. *Adhatoda vasica* Nees, Pl. Asiat. Rar. **3**: 103. 1832 (Acanthaceae).

Malabar nut (鸭嘴花), probably native to India, Indonesia, Malaysia, Nepal, Pakistan and Sri Lanka, but widely cultivated and naturalized in tropics, and widely used in Ayurvedic and Unani systems of medicine. It has been cultivated and naturalized in Guangdong, Guangxi, Hong Kong, Hainan, Macao, and Yunnan, especially in the greenhouse for ornamental purpose. In some literatures, it has been treated as *Adhatoda vasica* (万方浩等, 2012).

12. *Nerium oleander* Linnaeus, Sp. Pl. **1**: 209. 1753. Li P. T., A. J. M. Leeuwenberg & D. J. Middleton in Fl. Chin. **16**: 173. 1995. Syn. *Nerium indicum* Miller, Gard. Dict. (ed. 8) no. 2. 1768 (Apocynaceae).

Oleander (夹竹桃), native to Mediterranean area but now cultivated and often naturalized throughout the tropics, subtropics and temperate parts worldwide (Smith, 1988). In China, it is widely cultivated: Anhui, Beijing, Chongqing, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Hebei, Henan, Hongkong, Hubei, Hunan, Jilin, Jiangsu, Jiangxi, Liaoning, Macao, Shaanxi, Shandong, Shanghai, Sichuan, Tianjin, Yunnan, Zhejiang. In Chinese literatures, it has been widely used as *Nerium indicum* (Fan *et al.*, 2008; Teng, 2008; Sun *et al.*, 2009; Hu *et al.*, 2011). In FRPS, *Nerium oleander* is treated as ou zhou jia zhu tao (欧洲夹竹桃), with corona not spilted; however, in FOC, *Nerium indicum* is treated as synonym of *Nerium oleander*.

13. *Oenothera glazioviana* Micheli, Fl. Bras. **13** (2): 178. 1875. Chen J. R., P. C. Hoch & W. L. Wagner in Fl. Chin. **13**: 424. 2007. Syn. *Oenothera erythrosepala* (Bor-bás) Borbás, Magyar Bot. Lapok **2**: 245. 1903 (Onagraceae).

Red sepal evening primrose (黄花月见草),

apparently hybrid origin from the gardens in Europe between two N American species (Raven and Peng, 1993). It was introduced into the horticulture as early as 1860, grown for its particularly large, attractive flowers, and now widely naturalized in Asia, Africa, Europe, Australia, N and S America, Pacific islands (e. g. New Zealand, Hawaii) and in China: Anhui, Beijing, Chongqing, Fujian, Guangdong, Guangxi, Guizhou, Hebei, Henan, Heilongjiang, Hubei, Jilin, Jiangsu, Jiangxi, Liaoning, Nei Mongol, Shaanxi, Shandong, Shanxi, Shanghai, Sichuan, Taiwan, Tianjin, Yunnan, Zhejiang. It's usually called: yue jian cao (月见草) in Chinese, but was treated as *Oenothera erythrosepala* (Liu *et al.*, 2002; Chen *et al.*, 2003; Yi *et al.*, 2005; 龙茹等, 2008; He and Ge, 2008; Luo and Liu, 2008; Zhou *et al.*, 2008; Li *et al.*, 2009; Jiang *et al.*, 2009; Qi *et al.*, 2010; Zhao *et al.*, 2010; Shi and Li, 2011; Yu *et al.*, 2011; Lin *et al.*, 2012; Zhu and Yang, 2012).

14. *Sphagneticola trilobata* (Linnaeus) Pruski, Mem. New York Bot. Gard. **87**: 114. 1996. J. L. Strother in Fl. N. Amer. **21**: 126. 2006. Chen Y. S. & D. J. Nicholas Hind in Fl. Chin. **20–21**: 870–871. Basionym *Silphium triobatum* Linnaeus, Syst. Nat. (ed. 10) **2**: 1233. 1759. Syn. *Wedelia trilobata* (Linnaeus) Hitchcock, Rep. (Annual) Missouri Bot. Gard. **4**: 99. 1893 (Asteraceae).

Bay Biscayne creeping-oxeye (南美蜚菊), probably native to subtropics and tropics of the New World and introduced into the Old World. It has been cultivated as ornamental ground cover but escaped in many countries, occasionally naturalized on slopes and along roadsides at lower elevations. It is cultivated and naturalized in Fujian, Guangdong, Guangxi, Hainan, Hongkong, Macao, Sichuan, Taiwan, Yunnna, Zhejiang and usually treated as *Wedelia trilobata* (李振宇和解焱, 2002; Huang and Zeng, 2003; Zeng, 2003; 徐海根和强胜, 2004; Deng and Lu, 2004; Yan *et al.*, 2004; Wu *et al.*, 2005; 吴桂容, 2006; Guan *et al.*, 2006; Yan *et al.*, 2006; An *et al.*, 2007; Xie *et al.*,

2007; 解焱, 2008; Chen *et al.*, 2008; Jiang *et al.*, 2008; Wang *et al.*, 2008; Shi *et al.*, 2009; Wang *et al.*, 2009; Yang and Chen, 2009; Zeng *et al.*, 2009; Lin *et al.*, 2011; Yue *et al.*, 2011; Zhang and Xing, 2011; He *et al.*, 2012; Ma *et al.*, 2012; Wu *et al.*, 2012).

15. *Stylosanthes guianensis* (Aublet) Swartz, Kongl. Vetensk. Acad. Nya Handl. **10**: 301–302. 1789. Sa R. & A. D. Salinas in Fl. Chin. **10**: 135. 2010. Basionym *Trifolium guianense* Aublet, Hist. Pl. Guiane **2**: 776–778, pl. 309. 1775. Syn. *Stylosanthes gracilis* Kunth, Nov. Gen. Sp. (quarto ed.) **6**: 507–508, pl. 596. 1823 (Leguminosae).

Stylo (圭亚那笔花豆), native to Central and South America, now widely introduced into other tropical areas and sometimes naturalized. It has been cultivated and naturalized in Guangdong, Guangxi, Hainan, Hong Kong and Taiwan. In the past, this species has been used for soil stabilization, however, due to its invasive nature, it has not been recommended for further use. It's also treated as *Stylosanthes gracilis* in China (Shan *et al.*, 2006; Fan *et al.*, 2008) as ba xi mu xu (巴西苜蓿) in Chinese.

16. *Tradescantia pallida* (J. N. Rose) D. R. Hunt, Kew Bull. **30** (3): 452. 1975. R. B. Faden in Fl. N. Amer. **22**: 173. 2000. Basionym *Setcreasea pallida* Rose, Contr. U. S. Natl. Herb. **13** (9): 294. 1911. Syn. *Setcreasea purpurea* Boom, Acta Bot. Neerl. **4**: 167. 1955 (Commelinaceae).

Purple queen (紫竹梅), native to Mexico, is widely used as an ornamental plant in gardens and borders including China, as well as a ground cover or hanging pot, since it is remarkably shade-tolerant and can be thrived in a wide range of soil conditions. In southern United States and Australia, it is considered as an invasive species and has defied many attempts at control or eradication. In some literatures, it is also treated as *Setcreasea purpurea* (Chen *et al.*, 2006; Zhang and Zhang, 2009) in China.

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